

**UNITED STATES MARINE CORPS
STATEMENT OF WORK (SOW)
FOR
M60A1 TANK CHASSIS,
TRANSPORTING FOR BRIDGE,
ARMORED VEHICLE LAUNCHED, (AVLB)
SCISSORING TYPE
NSN 5420-00-889-2020
SOW-00-833-3-08940A-1/1
1 OCTOBER 1999**

TABLE OF CONTENTS

<u>PARAGRAPH</u>	<u>PAGE</u>
1.0 Scope	3
1.1 Background	3
2.0 Applicable Documents	3
2.1 Military Standards	3
2.2 Other Government Documents and Publications	3
2.3 Depot Maintenance Work Requirements	4
2.4 Industry Standards	5
3.0 Requirements	5
3.1 General Task	5
3.2 Detail Task	5
3.2.1 Phase I-Pre-Induction	5
3.2.2 Phase II-IROAN	6
3.2.3 Phase III-Inspection, Testing and Acceptance	6
3.2.4 Phase IV-Preparation for Shipment/Storage	6
3.3 Configuration Management	7
3.3.1 Configuration Status Accounting (CSA)	7
3.3.2 Configuration Control	8
3.4 Government Furnished Equipment (GFE)/ Government Furnished Materiel(GFM)	8
3.5 Contractor Furnished Materiel (CFM)	8
3.6 Electromagnetic Environmental Effects (E3) Procedures	8
3.7 Quality Assurance Provisions	8
3.8 Rejection	9
4.0 Reports	9
4.1 Repairable Item Inspection Report	9
4.2 Weekly Progress Report	9
4.3 Pre-shop Analysis/Final Inspection Record/Acceptance Tests/Final Assembly and Testing/Final Performance Check	9
4.4 Dynamometer Run-In Schedules	10

Appendix A - Inspection Standards

STATEMENT OF WORK (SOW)
Inspect Repair Only As Necessary (IROAN) Program
M60A1 Tank Chassis,
Transporting for Bridge,
Armored Vehicle Launched, (AVLB)
Scissoring Type

NSN 5420-00-889-2020

1.0 Scope. This Statement of Work (SOW), along with Depot Maintenance Work Requirements (DMWRs) 9-2300-378-1 and DWMR 9-2815-220, listed Military Standards, Government Documents and Publications, establishes and sets forth tasks and identifies the work efforts that shall be performed by the Contractors, for the purpose of this SOW, Contractor is defined as the commercial or government entity performing the (IROAN) in the effort of the M60A1 Tank Chassis, Transporting for the Bridge, Armored Vehicle Launched, (AVLB). These documents contain requirements to restore the M60A1 Tank Chassis, Transporting for Bridge, Armored Vehicle Launched, (AVLB) to Condition Code "A." Condition Code A is defined as "servicable/issuable without qualification, new, used, repaired or reconditioned materiel which is serviceable and issuable to all customers without limitation or restriction, including materiel with more than 6 months shelf-life remaining."

1.1 Background. IROAN is defined as "That maintenance technique which determines the minimum repairs necessary to restore equipment components or assemblies to prescribed maintenance serviceability standards by utilizing all available diagnostic equipment and test procedures in order to minimize disassembly and parts replacement."

2.0 Applicable Documents. The following documents form a part of this SOW to the extent specified. Unless otherwise specified, the issues of these documents are those listed in the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto which is in effect on the date of solicitation. In the event of conflict between the documents referenced herein and the contents of this SOW, the contents of this SOW shall be the superseding requirements.

2.1 Military specifications

MIL-PRF-62177D Performance Specification, Engine, Diesel: 12-Cylinder, 90⁰
V-Type, 750 HP AVDS 1790 Series Engines

2.2 Military Standards

MIL-STD-129 DoD Standard Practice for Military Marking

Military Standard (Guidance Only)

MIL-STD-973 Configuration Management

2.3 Other Government Documents and Publications

ATPD 2222	Chassis, Tank, Armored Vehicle, Bridge Launcher, M60A1 and M48A5: Processing for Storage and Shipment of
DMWR 9-2300-378-1	Depot Maintenance Requirement for Hull and Suspension Components for Tank, Combat, Full Tracked
DMWR 9-2815-220	Depot Maintenance Requirement for Engine W/Container: Turbosupercharged, Diesel, Fuel Injected, 90 ⁰ "V" Type, Air-Cooled, 12-Cylinder, Assembly; AVDS-1790-2D
MI-08940A-35/1	Installation of Singgars in the AVLB M60A1
TB 9-2300-378-14	Air Induction System Maintenance M48 and M60 Series Vehicles
TI-07585-15/13	Slave Starting Procedures for M60 Series Tanks
TI-07585-25/1	Hydraulic Fluid Replacement for M60 Series Tanks
TI-07585-25/2	Bus Bar Alignment for M60 Series Tanks
TI-07589-25/3	Installation Upper Roadwheel Arm Grease Seal
TI-2815-50/5	Application of Weight Code Identification Stamp on Pistons Diesel Turbosupercharged Engine AVDS-1790-2C and -1790-2DR
TI-5820-25/22	Electromagnetic Environmental Effects (E3) Procedures for Installation of Communication Equipment on U.S. Marine Corps Platforms
TI-85712-25/1	Generator and Starter Cradle Change M60 Series Tanks and The M88A1 Recovery Vehicle
TI-85712-25/2	Removal and Install ion for Transmission Oil Cooler Lines
TM-4750-15/1	Painting Registration Markings
TM-4750-15/2	Camouflage Pattern
TM 9-2520-223-34&P	Cross Drive Transmission W/Container, Model CD 850-6A Detroit Diesel Allison Division, GMC, Direct Support General Support Maintenance Manual (Including Repair Parts and Special Tools List)

2.4 Industry Standard

ANSI/ISO/ASQC Quality Systems
Q9002-94

EIA 625 Requirements for Handling Electrostatic-Discharge Sensitive ESDS
Devices

(Copies of military specifications and standards are available from the DOD Single Stock Point, Defense Automation Production Service Philadelphia, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-0179 or DSN 442-2179, or <http://www.dodssp.daps.mil>. Copies of other government documents and publications required by contractor in connection with specific SOW requirements shall be obtained from: Commander, Marine Corps Logistics Bases, Attn: Publications Branch (Code 876), 814 Radford Blvd; Albany Georgia 31704-1128, commercial telephone number (912) 439-5818/19 or DSN 567-5818/19, Depot Maintenance Work Requirement (DMWRs) required for this SOW and available from Commander, US Army Tank-Automotive Command, AMSPA-DSA-HT Bldg.231 4th Floor, Warren, MI 48397-5000.)

3.0 Requirements

3.1 General Task. In fulfilling the specified requirements, the contractor shall:

a. Provide material, labor, facilities, missing parts and repair parts necessary to inspect, diagnose, restore, and test the M60A1 Tank Chassis, Transporting for Bridge, Armored Vehicle Launched, (AVLB). Upon completion of the IROAN, vehicles shall be condition Code "A."

b. Conduct in-process and final on-site testing for witness by a MCLBA, Code 833-3 Marine Corps Logistics Bases, Albany, Georgia representative.

Note: The Armored Vehicle Launched (AVLB) shall be painted in accordance with TM-4750-15/1 and TM-4750-15/2.

3.2 Detail Tasks. The following tasks describe the different phases for IROAN of the M60A1 Tank Chassis, Transporting for Bridge, Armored Vehicle Launched, (AVLB).

3.2.1 Phase I - Pre-Induction inspection analysis shall be performed for each M60A1 Tank Chassis, Transporting for Bridge, Armored Vehicle Launched (AVLB) using the Contractor facility's diagnosis, inspection and testing techniques to determine extent of work and parts required. These findings shall be annotated in Appendix A, and shall be provided MCLBA, Code 833-3, in accordance with Section 4.0 of this SOW.

3.2.2 Phase II-IROAN. After pre-induction test and inspections have been completed, repair of the M60A1 Tank Chassis, Transporting for Bridge, Armored Vehicle Launched, (AVLB) shall be accomplished in accordance with all Depot Maintenance Work Requirements (DMWRs) and applicable publications and documents listed in this SOW. Deficiencies noted on the Pre-Induction Checklist during Phase I shall be repaired/replaced. Components shall not be disassembled for

replacement of mandatory parts unless that part has failed, or the component assembly wherein the part is located is disassembled for repair.

a. Hardware

(1) Replace broken, unserviceable and/or missing hardware including nuts, bolts, screws, washers, turnlock fasteners, mandatory replacement items, safety, and one-time use items, etc., in accordance with the SOW. Unserviceable would include any of the above that failed to function properly.

(2) Ensure proper hardware locking devices are present on all moving mechanical assemblies.

(3) Hardware normally supplied with commercial parts shall be used unless specifically prohibited.

3.2.3 Phase III - Inspection, Testing and Acceptance

a. Inspection, Testing and Acceptance of the M60A1 Tank Chassis, Transporting for Bridge, Armored Vehicle Launched, (AVLB) shall be conducted in accordance with Appendix A, and the DMWRs and applicable publications and documents listed in this SOW. The completed results shall be provided to MCLBA, Code 833-3, in accordance with Section 4.0 of this SOW.

b. The contractor shall be responsible for the conducting required test and shall ensure all necessary personnel are available to complete the final acceptance. Acceptance tests shall be held by the contractor. MCLBA, Code 833-3, shall be given a minimum of two weeks notice prior to the beginning of acceptance testing. The test area shall be clear of all equipment parts, components, etc., not required for the test.

c. The contractor shall be responsible for correcting any deficiencies identified during inspection/testing. MCLBA, Code 833-3, may require the contractor to repeat test or portions thereof, if the original test fails to demonstrate compliance with this SOW.

3.2.4 Phase IV – Packaging, Handling, Storage and Transportation (PHS&T)

a. The contractor shall be responsible for the preservation and packaging of the items being repaired under the terms of this statement of work. Items being prepared for shipment shall be in accordance with ATPD 2222 which may be obtained from Life Cycle Management Center, Attn: 822-1, 814 Radford Blvd ste 20320, Albany, GA 31704-0320, Commercial Telephone (912) 439-6785 or DSN 567-6785. Vehicles scheduled for long term storage shall be preserved to level “A.” Vehicles scheduled for immediate shipment to all locations with the exception of Maritime Pre-positioned Forces (MPF), shall be preserved to level “B”, Drive-on, Drive-off. Items being preserved to level “B”, Drive-on, Drive-off scheduled for overseas shipment shall have a lable affixed which reads, “NOT FOR WEATHER DECK STOWAGE.” Items scheduuled for MPF shall be preserved to level “B”, MPF Modified Drive away.

b. The terms “Drive-On/Drive-Off” and “MPF Modified Drive-Away” are defined as follows:

(1) Drive-On/Drive-Off - Batteries shall be hot and disconnected from the vehicle electrical system. Terminals and leads shall be taped. Fuel tank shall be filled $\frac{1}{4}$ tankfull. The air intake system and break systems, drive-train and gauges shall be depreserved.

(2) MPF Modified Drive-Away - Batteries shall be hot and connected to the vehicle electrical system. Fuel tank shall be filled $\frac{3}{4}$ full of JP8. The air intake system, exhaust and brake systems, drive-train and gauges shall be depreserved. Fire extinguisher bracket and seats shall be installed.

c. Marking shall be in accordance with MIL-STD-129.

d. Transportation costs associated with shipping the M60A1 Tank Chassis to and from the contractor will be provided by the Government. The contractor shall be responsible for shipping the M60A1 Tank Chassis to a pre-designated site.

e. A copy of ATPD 2222, if required, may be obtained by the contacting Commander (G330), Marine Corps Logistics Bases, 814 Radford Blvd, Albany, Georgia 31704-1128 or telephone (912) 439-6856/DSN 567-6856.

3.3 Configuration Management

3.3.1 Configuration Status Accounting (CSA)

a. The Contractors facility shall record and submit data on retrofit accomplished during Phase II. All approved Modification Instructions (MI's) shall be verified or applied during Phase II of the IROAN.

b. The contractor shall determine the application status of approved configuration changes by visual inspection. The government will identify the configuration changes to be inspected by furnishing a Configuration Inspection Checklist to the contractor. The contractor shall use one checklist, Appendix A, per M60A1 Tank Chassis, Transporting for Bridge, Armored Vehicle Launched, (AVLB) to record their inspection findings along with other required data.

c. The contractor shall record serial numbers of the assemblies listed on the Configuration Inspection Checklist. The contractor shall record the information on the same form that was used to record the application status of configuration changes.

3.3.2 Configuration Control. The baseline configuration for the M60A1 Tank Chassis, Transporting for Bridge, Armored Vehicle Launched, (AVLB) has been established in DMWR 9-2300-378-1, and applicable MI. No deviations of this baseline configuration shall be allowed unless authorized by MCLBA, Code 833-3. If it is necessary to depart from the authorized configuration, the contractor shall submit a Request for Deviation or a Request for Waiver, using MIL-STD-973, paragraph 5.4.3 or 5.4.4 as a guide, to Commander, Code 825-2, 814 Radford Blvd., Marine Corps Logistics Bases, Albany, Georgia 31704-1128.

3.4 Government Furnished Equipment Accountability (GFE)/Government Furnished Materiel (GFM). GFE is government owned equipment authorized by contract for use by a commercial/government contractor. It is neither consumed during production nor incorporated into

any product. GFM is materiel furnished to a contractor that will be consumed during the course of production or incorporated into product being manufactured/remanufactured under a contract/statement of work. In the event the Marine Corps does have GFE/GFM requirements, the Management Control Activity (MCA/827-2), Marine Corps Logistics Bases, Albany, Georgia, will coordinate required GFE and will maintain a central control system on Marine Corps assets in the contractors possession. The MCA will forward a GFE Accountability Agreement to the contractor facility for signature to establish a chain of custody and property responsibilities for Marine Corps assets. The contractor shall report receipt of all GFM and report consumption of GFM to the MCA.

3.5 Contractor Furnished Materiel (CFM). The Marine Corps has adopted the Navy's procedures regarding CFM (NAVICPINST 4491.2A). In the event that Contractor Furnished Materiel is required for repair parts, the contractor shall requisition through the DOD Supply System. DOD 4000.25-1-M (MILSTRIP) Chapter 11 authorizes contractors to requisition through the DOD Supply System.

3.6 Electromagnetic Environmental Effects (E3) Procedures.

a. The contractor shall plan for the proper E3 control procedures in the IROAN process and use TI-5820-25/22 in conjunction with the detailed requirements specified in this document.

b. Electrostatic Discharge (ESD) Control Program. The contractor shall establish, implement, and document an ESD control program following the guidelines provided in EIA-625. ESD protective measures shall be used during manufacturing, handling, inspection, test, marking, packaging, storing, and transporting ESD sensitive components.

3.7 Quality Assurance Provisions. The performance of the contractor and the quality of work delivered, material, and documents written shall be subject to review and inspection by MCLBA, Code 833-3, during contract performance at any work location. An authorized MCLBA, Code 833-3 representative shall be permitted to observe the work/task accomplishment or to conduct inspections during working hours. Inspection by a MCLBA, Code 833-3 representative of test plans and materials furnished hereunder does not relieve the contractor from any responsibility regarding defects or other failures to meet contract requirements which may be disclosed prior to final acceptance. Failure of the contractor to promptly correct deficiencies discovered shall be reason for suspension of acceptance until corrective action has been accomplished. The contractor shall have in place documented procedures and standards for quality assurance and the contractors work shall be subject to reviews and inspections for compliance with the procedures and standards by MCLBA, Code 833-3. Noncompliance with procedures resulting in degraded quality of work may result in a stop-work order requiring action by the contractor to correct the work performed and to enforce compliance with quality assurance procedures or face contract termination. Notwithstanding such MCLBA, Code 833-3 inspection, it shall be the contractors responsibility to ensure that the entire system meets the performance requirements delineated and addressed in this SOW and applicable references. The contractor shall establish and maintain an Inspection System Requirement in compliance with ANSI/ISO/ASQC Q9002-94 and in accordance with this SOW. The contractor shall provide an Inspection and Test Plan to MCLBA, Code 833-3.

3.8 Rejection. Failure to comply with any of the specified requirements listed herein shall be reason for rejection by MCLBA, Code 833-3. The contractor shall, at no additional cost to MCLBA, Code 833-3, provide the following:

a. Develop an approach for modification or correction of all deficiencies.

b. Upon approval of a documented approach, the contractor shall correct the deficiencies and result the verification until an acceptable compliance with acceptance test procedures is demonstrated.

4.0 Reports.

4.1 Repairable Item Inspection Report. The contractor shall provide a Repairable Item Inspection Report, to MCLBA, Code 833-3, for each M60A1 Tank Chassis, Transporting for Bridge, Armored Vehicle Launched, (AVLB). The report shall be identified by U.S. Marine Corps Serial Number.

4.2 Weekly Progress Report. The contractor shall provide Weekly Progress Reports, to MCLBA, Code 833-3, summarizing the progress and status of the IROAN Program.

4.3 Pre-shop Analysis/Final Inspection Record/Acceptance Tests/Final Assembly and Testing/Final Performance Check. The contractor shall complete a Pre-shop Analysis Checklist, Final Inspection Record, Acceptance Test, Final Assembly and Testing, and Final Performance Check for each M60A1 Tank Chassis, Transporting for Bridge, Armored Vehicle Launched, (AVLB) repaired. These documents shall be available during final acceptance testing. One copy of each document shall be provided to MCLBA, Code 833-3 after final acceptance of the M60A1 Tank Chassis, Transporting for Bridge, Armored Vehicle Launched, (AVLB).

4.4 Dynamometer Run-In Schedules. The contractor shall complete a copy of the Dynamometer Run-In Schedules. These documents shall show dynamometer test results required on the M60A1 Tank Chassis, Transporting for Bridge, Armored Vehicle Launched, (AVLB) during the Pre-Induction Phase. These documents shall be available during final acceptance testing. One copy shall be provide MCLBA, Code 833-3 after acceptance of the M60A1 Tank Chassis, Transporting for Bridge, Armored Vehicle Launched, (AVLB).

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0101-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP _____ TM _____ OTHER <input checked="" type="checkbox"/>
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D. SYSTEM/ITEM M60A1 Tank Chassis, AVLB	E. CONTRACT/PR NO.	F. CONTRACTOR
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1. DATA ITEM NO. A001	2. TITLE OF DATA ITEM Status Report	3. SUBTITLE Weekly Report
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4. AUTHORITY (Data Acquisition Document No.) DI-MGMT-80368	5. CONTRACT REFERENCE SOW 4.2	6. REQUIRING OFFICE MCLBA (833)
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7. DD 250 REQ LT	8. DIST STATEMENT REQUIRED A	9. FREQUENCY WEEKLY	10. DATE OF FIRST SUBMISSION See Blk 16	14. DISTRIBUTION		
8. APP CODE	11. AS OF DATE	12. DATE OF SUBSEQUENT SUBMISSION See Blk 16	a. ADDRESSEE		b. COPIES	
				Draft	Final	
					Reg	Repro

16. REMARKS Blk 12 - The reporting period shall be from the first to last business day of each week. Initial submission shall be 60 DAC. Blk 13 - Subsequent submissions shall be 7 days after the last calendar day of each week. Distribution Statement A: Approved for public release; distribution is unlimited.	15. TOTAL	0	1	0

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

G. PREPARED BY <i>[Signature]</i>	H. DATE 9-12-99	I. APPROVED BY <i>[Signature]</i>	J. DATE 9-12-99
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A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP _____ TM _____ OTHER _____ <input checked="" type="checkbox"/>
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D. SYSTEM/ITEM M60A1 Tank Chassis, AVLB	E. CONTRACT/PR NO.	F. CONTRACTOR
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1. DATA ITEM NO. C002	2. TITLE OF DATA ITEM Request For Waiver	3. SUBTITLE Configuration Management
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4. AUTHORITY (Data Acquisition Document No.) DI-CMAN-80641B	5. CONTRACT REFERENCE SOW 3.3.2	6. REQUIRING OFFICE MCLBA (825)
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7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION SEE BLK 16	14. DISTRIBUTION			
8. APP CODE A		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION	a. ADDRESSEE MCLBA (825-2)	Draft	b. COPIES	
						Final	
						Reg	Repro

16. REMARKS Blk 4 - Contractor format is authorized. Blks 10 & 12 - RFWs shall be submitted to obtain authorization to deliver nonconforming material which does not meet prescribed configuration documentation. RFWs will be reviewed and disposition determined within 30 calendar days upon receipt by the Government. RFWs shall be transmitted via E-Mail to the following address: mbmatcomconfigmngmnt@matcom.usmc.mil Distribution Statement A: Approved for public release, distribution is unlimited							
				15. TOTAL	0	1	0

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

G. PREPARED BY Doug Lee Smith JA	H. DATE 01-10-99	I. APPROVED BY <i>[Signature]</i>	J. DATE 1 Oct 99
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